

# OS/390 System Operations

With the system operations facility, you can perform certain monitoring and administrative functions: you can display the system log, active jobs, the console, lists of units, enqueue, and you can use IDCAMS services and issue operator commands.

To enter the system operations facility, select the SYSTEM option from the Natural ISPF Main Menu. The System Facilities Menu appears:

```
----- SYSTEM FACILITIES -----
OPTION ===>

      Userid      MBE
      Time       08:39:41
      Terminal   DAEELC521
      Library    MBE
      Node       148

1   LOG          - Display system log
2   ACTIVE JOBS - Display address space information
3   CONSOLE      - Console display and commands
4   UNITS        - Display unit information
5   ENQUE        - Display ENQ information
6   IDCAMS      - IDCAMS services

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help   Split End   Suspe Rfind Rchan Up     Down Swap Left Right :s
```

The System Facilities Menu provides the following options:

- LOG: display system log;
- ACTIVE JOBS: display active job information according to selection criteria;
- CONSOLE: display console and issue operator commands;
- UNITS: list units and display unit information;
- ENQUE: list queues and 'dequeue' resources, that is, remove locks from them;
- IDCAMS: use IDCAMS services.

These options are described in more detail in the following subsections.

## System Log

If you select the LOG option from the System Facilities Menu, the system log is displayed in Editor format in browse mode. The last screen page of the system log appears. You can use all Editor browse commands (UP, DOWN, TOP, BOTTOM, FIND).

The system log is a separate object in Natural ISPF with object type LOG. To invoke the system log from any screen, use the function command

```
BROWSE LOG NODE=id
```

where **id** is the Entire System Server node number of the CPU to be addressed (in multi-CPU environments).

## Active Jobs Display

You can access active job information via the System Facilities Menu. Active jobs are also separate Natural ISPF objects with Object Type ACT (see the subsection Function Commands).

If you select the ACTIVE JOBS option from the System Facilities Menu, the Active Jobs Entry Panel appears:

-----ACTIVE-JOBS--ENTRY-PANEL-----		
COMMAND ==>		
Job	==>	
Type	==>	( Combination of: S,T,J,I )
Only IN	==>	( Y, or blank)
Node	==>	
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---		
HELP    SPLIT END    SUSPE RFIND RCHAN UP    DOWN    SWAP    LEFT    RIGHT CURSO		

Meaning of the input fields:

Field	Meaning
Job	Job name. Use a combination of strings and wildcards (*) and (_) to generate a selective list of jobs as described in the subsection Selection Windows and Wildcards in the section Command Logic.
Type	Job type. Possible values: <b>I</b> Job entry system initiator (INI) <b>J</b> Standard operating system job (JOB) <b>S</b> Started task (STC) <b>T</b> TSO user (TSU) or any combination (e.g., JT selects all JOB- and TSU-type jobs).
Only IN	Specify <b>Y</b> to display in-memory active jobs only. Leave blank to show all jobs as specified in Job and Type fields.
Node	Optional. Specify Entire System Server node. Enter a question mark ? and press Enter to list available nodes. Leave blank to select the default node.

You can type selection criteria in the input fields and enter a function command in the command line.

## Function Commands

The following function commands are available for active jobs:

Command	Object Parameter Syntax
BROWSE	job-name NODE=id <sup>1</sup>
INFORMATION	job-name NODE=id <sup>2</sup>
LIST	* __ * TYPE=t IN=Y/N NODE=id

<sup>1</sup> The BROWSE command selects file SM1 of the job for display. You can use the local commands to select another SYSOUT file of the job.

<sup>2</sup> The INFORMATION command lists the loaded modules of the job.

**Note:**

If you issue any of these commands from outside the active jobs facility, you must specify object type ACT before the object parameters in the command syntax.

Below is an example of the LIST command.

**Example: LIST command**

The following figure shows a list of active jobs generated using the command:

```
LIST ACT * TYPE=JT

LIST-ACT:*/TYPE=JT ----- Row 0 of 12 - Columns 001 076
COMMAND===>                                     SCROLL===> CSR
      JOBNAME   CLASS   STEP     PROC      TYP  JOBNO POS DSP REG    CPU      IO
** ***** top of list ***** *****
      WKY           TSU 04952 OUT 255      0 0:15.04    6520
      TKIL          TSU 04965 OUT 255      0 0:14.67    1317
      SAGTMH        TSU 04954 OUT 255      0 0:03.96    661
      BGW           TSU 04975 OUT 255      0 0:01.40    362
      EB            TSU 04788 OUT 255      0 0:02.99    519
      RAK           TSU 05006 OUT 255      0 0:02.43    796
      EB1           TSU 04960 OUT 255      0 0:01.73    652
      SAGT          K      NUC          JOB 04686 N-S  87    240 0:01.30    434
      IMSMAF1H     M      STEP01    REGION   JOB 02100 N-S  88    108 0:00.20    289
      NQAN22X      M      NDBM222   REGION   JOB 04887 N-S  82    120 0:00.76    586
** ***** bottom of list ***** *****
```

Enter PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
 Help Split End Suspe Rfind Rchan Up Down Swap Left Right Curso

The list shows all JOB- and TSU-type active jobs. The in-memory jobs appear highlighted in this list.

Meaning of the fields according to column heading:

Column	Meaning
JOBNAME	Job name.
CLASS	JES2 batch initiator class(es) (JOB- orINI-type jobs only).
STEP	Name of step currently executed.
PROC	Name of procedure currently executed.
TYP	Job type (JOB, TSU, STC, INI).
JOBNO	Job number.
POS OUT	IN - Job is in-memory. N-S - Not swappable. Job is not in-memory.
DSP	Dispatching priority.
REG	Amount of real storage used by address space in Kbytes.
CPU	CPU time consumed by address space in minutes.
IO	Number of I/O operations performed so far.

The list is refreshed every time you press Enter.

## Line Commands

Line Command	Corresponding Function Command	Remarks
B	BROWSE	From the list of SYSOUT files (obtained with the <b>L</b> line command), you can select a file for display using the <b>B</b> line command (BROWSE).
I	INFORMATION	The load modules of an active job can be listed using the INFO command from the list of active jobs.
L	LIST	This line command is available on a list of active jobs for listing the SYSOUT files for the job. SYSOUT files of active jobs can be handled as SYS-type objects described in the subsection Job Information.

### Example: INFORMATION line command

The list obtained with the **I** line command appears in Natural ISPF Editor format in BROWSE mode. This means you can use all available BROWSE commands (UP, DOWN, BOTTOM, TOP, FIND, LOCATE). For example, the following list was generated by issuing the **I** line command for the job XCOM140:

```

LIST-LMOD:XCOM140 ----- Columns 026 076
COMMAND===> SCROLL===> CSR
    MODULE   ADDRESS LENGTH      TYPE ENTRY     USE STATE    PSW      TCB
** ***** top of list *****
    XCOMWOPN 000352D8 000510      PRB 000352D8 1  WAIT    00035340 008ED9E
    XCOMSMFW 0008C7F8 000808      PRB 0008C7F8 1  WAIT    0008C9CE 008EDCF
    XCOTABE 00108860 0017A0      LOAD 00108860 1
    NATPCMDL 000CC290 0006B0      LOAD 000CC290 1
    XCOMV206 00105CF0 001310      LOAD 00105CF0 1
    XCOMV203 00103F60 0010A0      LOAD 00103F60 1
    XCOMV204 00100E70 002190      LOAD 00100E70 1
    XCOMVUSO 000EA028 000578      LOAD 000EA028 1
    XCOMV200 000FE990 001670      LOAD 000FE990 1
    XCOMV191 000FD6C8 000938      LOAD 000FD6C8 1
    XCOMV190 000FB4E8 0008A8      LOAD 000FB4E8 1
    XCOMV063 000FBD90 001270      LOAD 000FBD90 1
    XCOMVUSI 000EF0AO 0005C0      LOAD 000EF0AO 1
    XCOMV046 000F7308 000C80      LOAD 000F7308 1
    XCOMV045 000E9090 000578      LOAD 000E9090 1
    XCOMV044 000F9508 001AF8      LOAD 000F9508 1
    XCOMV043 000F30EO 000D18      LOAD 000F30EO 1
    XCOMV042 000F12F0 000908      LOAD 000F12F0 1
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help   Split End   Suspe Rfind Rchan Up      Down   Swap   Left   Right   Curso

```

Use the RIGHT Editor command (usually assigned to PF11) to scroll right and display the last column for the list.

The meaning of the column headings:

Heading	Meaning
MODULE	Name of load module.
ADDRESS	Load address of module.
LENGTH	Length of module.
TYPE	Module type: <b>LOAD</b> Module was loaded. <b>PRB</b> Module is an active program. <b>IRB</b> Interrupt request. <b>TIRB</b> Interrupt request. <b>SIRB</b> Interrupt request. <b>SVRB</b> Supervisor SVC.
ENTRY	Entry point of module.
USE	Use count of module.
STATE	Run state of program (TYPE is anything except LOAD): <b>WAIT</b> Program is in wait state. <b>RUN</b> Program is running. <b>SUSPEND</b> Program is suspended.
PSW	Current Program Status Word for a program (when TYPE is anything except LOAD).
TCB	Address of Task Control Block.
MOTHER	TCB address of task which attached this task.

### Example: BROWSE line command for load modules

You can select load modules from the list using the line command BROWSE which displays the module loaded in memory. The following screen shows the result of the BR line command for module NATPCMDL:

```
BROWSE-LMOD:XCOM140(NATPCMDL) ----- Columns 001 059
COMMAND===> SCROLL===> CSR
      OFFSET DATA          TEXT
** **** top of list *****
000000 47FF0024 D5D7D9C3 E5F1F3F4 D5C1E3D7 å ?NPRCV134NATP
000010 C3D4C4D3 F9F460F0 F360F1F8 F1F64BF5 CMDL94-03-1816.5
000020 F8404040 90ECD00C 18BF50D0 B5E841F0 8   & \ü??é&ü@Y_0
000030 B5E450FD 000841D0 B5E418F0 47FFB040 @U&Ü ?_1 ü@U?0å ¢
000040 47F0B04C 47F0B0FA 47F0B53C 18215010 å0¢<å0¢Eå0@???&?
000050 B6604110 B57C4100 B6580A18 86FFB572 ¶-_1 ?@§_1 ¶ì??f @Ê
000060 9200B672 4110B66C 41000006 D502B654 k ¶È_1 ?¶%_1 ?N ¶è
000070 90004770 B07CD600 B6721000 41110001 & åø¢§O ¶È? _1 ? ?
000080 41990003 4600B06C 9180B672 4780B572 _1 r ã ¢%jØ¶ÈåØ@Ê
000090 95409000 4780B0C0 D403B668 B6684770 n & åø¢äM ¶Ç¶Çåø
0000A0 B0C00700 41009000 5810B0B0 47F0B0B4 ¢ä? _1 & ï?¢¢å0¢P
0000B0 80000000 0A0812FF 4770B0C0 5000B668 Ø ??? åø¢ä& ¶Ç
0000C0 9110B5B4 4710B572 4510B0D0 8F0CC814 j?@På?@ßá?¢ú>?H?
0000D0 0A139110 B5B44780 B0F6D403 B664B664 ??j?@PåØ¢6M ¶À¶À
0000E0 4770B0F2 4800B5C2 4510B0EC 0A0A5010 åø¢2ç @Bá?¢\? ?&?
0000F0 B6649201 B67347F0 B5725820 B6609180 ¶Àk?¶Èå0@ßí?¶-jØ
000100 B6724780 B5389501 B6734770 B5385870 ¶ÈåØ@?n?¶ÈåØ@?ïø
000110 B6645840 6008D201 B674401C D201B676 ¶Àì -?K?¶È ?K?¶Î
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help Split End Suspe Rfind Rchan Up Down Swap Left Right Curso
```

## Console Display

If you select the CONSOLE option from the System Facilities Menu, the console appears. The following figure shows an example console:

```
BROWSE-CON: /NODE=148/TYPE=ALL ----- Columns 001 076
COMMAND===> SCROLL===> CSR
    SERV PG PAGE SWAP VIO SWAPS
JOB05957 -QTRSRXBP N21SRXBP C          00     371    907    .01    .00
    7485  2      0      0      0
JOB05957 IEF404I QTRSRXBP - ENDED - TIME=14.25.23
JOB05957 -QTRSRXBP ENDED. NAME-          TOTAL TCB CPU TIME=
    TOTAL ELAPSED TIME=.1
JOB05957 .HASP395 QTRSRXBP ENDED
    .HASP309 INIT 4 INACTIVE ***** C=K
JOB05956 -HPFCOB COB          12     434   1222    .00    .00
    4640  2      0      0      0
STC05724 .P      J05929
JOB05929 .HASP608 HPFCOB    AWAITING PURGE      PRIO 1 PURGE ANY
JOB05956 -HPFCOB LNK          FLUSH          0      0    .00    .00
    0  2      0      0      0
JOB05929 .HASP250 HPFCOB    IS PURGED
JOB05956 IEF404I HPFCOB - ENDED - TIME=14.25.25
JOB05956 -HPFCOB ENDED. NAME-          TOTAL TCB CPU TIME=
    TOTAL ELAPSED TIME=.2
JOB05956 .HASP395 HPFCOB ENDED
    .HASP309 INIT 3 INACTIVE ***** C=K
IKT100I USERID      CANCELED DUE TO UNCONDITIONAL LOGOFF
** ***** bottom of list *****

```

You can select information to be displayed by entering one of the following local commands:

Local Command	Meaning
ALL	Displays all information.
LINES <i>nnn</i>	Control the number of lines held in the session ( <i>nnn</i> <= 999).
LINES RESET	Returns to the original number of lines: 1 screen size.
PEND	Displays only those lines waiting for an operator reply (WTOR).

**Note:**

To monitor your system, you can use the REFRESH *n* command to automatically update the screen with the latest console messages. See also Automatic Screen Refresh in the section Useful Features.

The console screen is refreshed every time you press Enter. You can enter any operator command in the command line if you precede it with the session command OPERATOR, usually assigned to the magic character stroke /:

```
/operator-command
```

If you type a plus sign + after the command string, a window opens in which you can type an operator command string of up 80 characters in length. This is useful in the following situations:

- if the command line is too short for the operator command;
- if the command string contains special characters that have a special meaning in Natural ISPF (magic characters, delimiters). These characters are not interpreted as Natural ISPF characters when typed in the operator command window.

**Note:**

The Natural ISPF command OPERATOR followed by an operator command can be issued from any system screen.

The console is a separate object within Natural ISPF with object type CON. You can access the console from any system screen using the function command BROWSE in the following format:

```
BROWSE CON TYPE=ALL/PEND NODE=id
```

where *id* is the Entire System Server node number of the CPU whose console is to be displayed (in multi-CPU environments).

## System Units

The UNITS option on the System Facilities Menu allows you to list system units and request information on a specific unit.

```
----- SYSTEM UNITS - ENTRY PANEL -----
COMMAND ===>

Volser      ===>
Class       ===>          ( DASD,TAPE )
Status      ===>          ( ONLINE,OFFLINE,CHANGE )
Unit        ===>
Node        ===>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help   Split End   Suspe Rfind Rchan Up   Down   Swap   Left   Right :s
```

You can specify the volume you wish to access in the input fields and enter a function command in the command line.

Meaning of the input fields:

Field	Meaning
Volser	Volume serial number. Enter a volume name to display information about a specific volume. Enter the wildcard * to select all volumes or any volume, or a prefix with an * (for example, ABC*) to select all volumes starting with that prefix.
Class	Select a specific class of units when generating a list of units. Examples of valid classes are: COMM, CTCA, DASD, DISP, TAPE, UREC.
Status	Selection criterion when listing units: all units in the specified status are listed. Valid values are: CHANGE, OFFLINE, ONLINE.
Unit	Selection criterion when listing units All units with the specified unit address or prefix (for example, 4*) are selected.
Node	Optional. Specify Entire System Server node. Enter a question mark ? and press Enter to list available nodes. Leave blank to select the default node.

System units are separate objects in Natural ISPF with object type UNI. This means you can issue the relevant function command from any system screen (see the subsection on function commands below).

## Function Commands

The following function commands are available for system units:

Command	Object Parameter Syntax
INFORMATION	VOLSER
LIST	VOLSER CLASS=c STATUS=s UNIT=u NODE=id

The INFORMATION command is also available as line command (**I**) from lists of units generated with the LIST command.

### Example: LIST (1)

The following list is the result of the command:

```
LIST UNI VOLSER=* CLASS=DASD UNIT=*
```

```

LIST-UNI : /VOLSER=* /CLASS=DASD /UNIT=* ----- Row 0 of 470 - Columns 019 076
COMMAND===>                                                 SCROLL===> CSR
    CLASS UNIT VOLSER          SERIES STATUS MOUNT      VOLUME ACTIVITY DENS
** ***** top of list *****
    DASD 100 BMC003           3380  ONLINE RESIDENT   PRIVATE
    DASD 101 BMC004           3380  ONLINE RESIDENT   PRIVATE
    DASD 102                 3380  OFFLINE
    DASD 103                 3380  OFFLINE
    DASD 104                 3380  OFFLINE
    DASD 105                 3380  OFFLINE
    DASD 106                 3380  OFFLINE
    DASD 107                 3380  OFFLINE
    DASD 108                 3380  OFFLINE
    DASD 109                 3380  OFFLINE
    DASD 10A                 3380  OFFLINE
    DASD 10B                 3380  OFFLINE
    DASD 10C                 3380  OFFLINE
    DASD 10D                 3380  OFFLINE
    DASD 10E                 3380  OFFLINE
    DASD 10F                 3380  OFFLINE
    DASD 110 BMCRES           3380  ONLINE RESIDENT   PRIVATE
    DASD 111 BMC001           3380  ONLINE RESIDENT   PRIVATE
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help Split End Suspe Rfind Rchan Up Down Swap Left Right :s

```

The list shows all direct access units.

To display more information, issue the RIGHT command (usually assigned to PF11):

```

LIST-UNI : /VOLSER=* /CLASS=DASD /UNIT=* ----- Row 0 of 470 - Columns 077 134
COMMAND===>                                                 SCROLL===> CSR
    CLASS UNIT VOLSER DCB FREE(CYL/TRK) CONTIG(CYL/TRK) FREE-EXT TOT-CYL TRK/CYL
** ***** top of list *****
    DASD 100 BMC003  1  72 ,  29       60 ,  0     7   886   15
    DASD 101 BMC004  1  14 ,  31       5 ,  14    10   886   15
    DASD 102         0  0 ,  0        0 ,  0     0   0
    DASD 103         0  0 ,  0        0 ,  0     0   0
    DASD 104         0  0 ,  0        0 ,  0     0   0
    DASD 105         0  0 ,  0        0 ,  0     0   0
    DASD 106         0  0 ,  0        0 ,  0     0   0
    DASD 107         0  0 ,  0        0 ,  0     0   0
    DASD 108         0  0 ,  0        0 ,  0     0   0
    DASD 109         0  0 ,  0        0 ,  0     0   0
    DASD 10A        0  0 ,  0        0 ,  0     0   0
    DASD 10B        0  0 ,  0        0 ,  0     0   0
    DASD 10C        0  0 ,  0        0 ,  0     0   0
    DASD 10D        0  0 ,  0        0 ,  0     0   0
    DASD 10E        0  0 ,  0        0 ,  0     0   0
    DASD 10F        0  0 ,  0        0 ,  0     0   0
    DASD 110 BMCRES  1  27 ,  36       11 ,  0     12  886   15
    DASD 111 BMC001  1  81 ,  167      69 ,  14    25  886   15
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help Split End Suspe Rfind Rchan Up Down Swap Left Right :s

```

Meaning of the column headings:

Column	Meaning
CLASS	Device class. Possible classes are: <b>COMM</b> Communications <b>CTCA</b> Channel-to-channel adapter <b>DASD</b> Direct access <b>DISP</b> Display station <b>TAPE</b> Tape <b>UREC</b> Unit record
UNIT	Unit address in EBCDIC.
VOLSER	Volume serial number currently mounted on the unit.
SERIES	Device series.
STATUS	Device status. Possible values are: CHANGE (status is changing), OFFLINE, ONLINE.
MOUNT	Mount status. Possible values: MOUNT PEND, NOT READY, REMOVABLE, RESERVED, RESIDENT.
VOLUME	Volume status. Possible values: PRIVATE, PUBLIC, STORAGE.
ACTIVITY	Activity of device. Possible values: ALLOCATED, BUSY.
DENSITY	Tape density. Possible values: 800, 1600, 6250, 800/1600, 1600/6250.
DCB	Number of DCBs currently open on the unit.
FREE	Number of free cylinders and tracks on disk pack.
CONTIG	Number of cylinders and tracks in largest free extent.
FREE-EXT	Number of free extents on disk pack.
TOT-CYL	Total number of cylinders on disk pack.
TRK/CYL	Number of tracks per cylinder.

### Example: LIST (2)

The following list is the result of the command:

```
LIST UNI VOLSER=* CLASS=TAPE UNIT=80*
```

The list shows all tape units with addresses starting with 80. To display more information, issue the RIGHT command (usually assigned to PF11).

```

LIST-UNI:/VOLSER=*/CLASS=TAPE/UNIT=80* ----- Row 0 of 16 - Columns 019 076
COMMAND==>
      CLASS UNIT VOLSER          SERIES STATUS MOUNT      VOLUME ACTIVITY DENS
** **** top of list ****
  TAPE  801                  3480 OFFLINE           800
  TAPE  800                  3480 OFFLINE           800
  TAPE  802 000673          3480 ONLINE REMOVABLE   800
  TAPE  803                  3480 ONLINE NOT READY 800
  TAPE  804                  3480 OFFLINE           800
  TAPE  805                  3480 OFFLINE           800
  TAPE  806                  3480 OFFLINE           800
  TAPE  807                  3480 OFFLINE           800
  TAPE  808                  3480 OFFLINE           800
  TAPE  809                  3480 OFFLINE           800
  TAPE  80A                  3480 OFFLINE           800
  TAPE  80B                  3480 OFFLINE           800
  TAPE  80C                  3480 OFFLINE           800
  TAPE  80D                  3480 OFFLINE           800
  TAPE  80E                  3480 OFFLINE           800
  TAPE  80F                  3480 OFFLINE           800
** **** bottom of list ****
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
     Help   Split End   Suspe Rfind Rchan Up      Down   Swap   Left   Right :s

```

For an explanation of the information displayed, see the first LIST example.

### **Example: INFORMATION**

The following display is the result of the command:

```
INFO UNI VOLSER=BMC003
```

```

----- VTOC SUMMARY INFORMATION DBA003 -----
COMMAND ==>

      SERIES      : 3380
      UNIT       : 5C3
      VOLUME DATA
        TRACKS/CYL   : 15
        %USED        : 100

              CYLINDER      TRACKS
      TOTAL SPACE   : 2656      39840
      FREE SPACE    : 0 +       0
      LARGEST       : 0 +       0

      FREE EXTENTS  : 0

      SMS CONTROL   : NO

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
     Help   Split End   Suspe Rfind Rchan Up      Down   Swap   Left   Right Curso

```

Most of the information provided by this display repeats the information given for the volume in the list of units (see the example for DASD units), except that here, the usage of space is shown as a percentage of total space.

**Note:**

Some information displayed in the above screen is available only in OS/390 environments and not in VSE/ESA environments.

## Local Commands

When displaying a list of units in Editor format, you can issue the following local commands from the Editor command line in addition to scroll commands: ALL, LAYOUT, RELIST and SORT. For detailed information, see the subsections in the section Useful Features.

## System Enqueues

The ENQUE option on the System Facilities Menu allows you to list and delete system enqueues.

```
----- SYSTEM ENQUE ENTRY PANEL -----
COMMAND ===>

Queue      ===>
User       ===>
Resource   ===>
Job Name   ===>
Node       ===>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help     Split End    Suspe Rfind Rchan Up     Down   Swap   Left   Right :s
```

You can specify the enqueue you wish to access in the input fields and enter a function command in the command line.

Meaning of the input fields:

Field	Meaning
Queue	Major name of the resource, which is usually the purpose of the enqueue (for example, SPFEDIT).
User	Name of the user who holds the queue. Can be used as selection criterion when listing enqueues: enter the wildcard * to select all users or a prefix followed by an * (for example, ABC*) to select all users beginning with that prefix.
Resource	Minor name of the resource, which is usually the object of the enqueue (for example, a dataset name). Can be used as selection criterion when listing enqueues with the wildcard * (see User field).
Job Name	Name of the job that holds the queue. Can be used as selection criterion when listing enqueues with the wildcard * (see User field).
Node	Entire System Server node. Enter a question mark ? and press Enter to list available nodes. Leave blank to select the default node.

System enqueues are separate objects in Natural ISPF with object type ENQ. This means you can issue the relevant function command from any system screen, provided you have appropriate authorization to access Object Type ENQ.

## Function Commands

The following function commands are available for system enqueues:

Command	Object Parameter Syntax
DELETE	Not applicable: available as line command only.
LIST	QUEUE USER=u JOB=j NODE=id

The DELETE command is available only as line command (**D**) from lists of enqueues generated with the LIST command. The DELETE command 'dequeues' an enqueue, that is, the resource is released.

### Example: LIST

The following list is the result of the command:

```
LIST ENQ SPFEDIT* JOB=XCOM148
```

```

LIST-ENQ:SPFEDIT*/JOB=XCOM148 ----- Row 0 of 33 - Columns 069 076
COMMAND===>                                                 SCROLL===> CSR
      JOBNAME   QUEUE    RESOURCE-NAME                      USERID
** **** * top of list **** * **** * **** * **** * **** * **** *
  XCOM148  SPFEDIT  ADABAS.SYSF.QAS.KM.KM02.V600.SMP(KM020000)  KM
  XCOM148  SPFEDIT  ADABAS.SYSF.QAS.KM.KM02.V600.SMP(KM020073)  KM
  XCOM148  SPFEDIT  ADABAS.V61.DEP.SOURCE(SVCMS)            RR
  XCOM148  SPFEDIT  SUG.CPS.SRC(MAINC)                   SUG
  XCOM148  SPFEDIT  SUG.CPS.SRC(SECLOAD)                 SUG
  XCOM148  SPFEDIT  KSI.JCL.ALL(KSIRPC1)                KSI
  XCOM148  SPFEDIT  RR.SYSF.SOURCE(ADAREP)              RR
  XCOM148  SPFEDIT  RR.SYSF.SOURCE(ADA7200)              RR
  XCOM148  SPFEDIT  ADABAS.V53.DEP.SOURCE(#GEN)        RR
  XCOM148  SPFEDIT  KHK.SOURCE(NA22PR32)                KHK
  XCOM148  SPFEDIT  TST.NAT228.JCL(NATSRCEV)           DWI
  XCOM148  SPFEDIT  ADASQL.PROBLEM(CEXAM1)             RSH
  XCOM148  SPFEDIT  HEB.SOURCE(COOR-IMP)               HEB
  XCOM148  SPFEDIT  COM.RDC.V34.SYSTEM(RDCFRT)          SAGAWW
  XCOM148  SPFEDIT  ADASQL.TEST.SOURCE(GOALC)           RSH
  XCOM148  SPFEDIT  COM.SYSF.SAGAWW.SOURCE(VSAMPR)       SAGAWW
  XCOM148  SPFEDIT  AVB.V331.SOURCE(MCTAB)              WGL
  XCOM148  SPFEDIT  NISPF.IV211.DV01.MVSSRCE(NATZAP)    JWO
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12--
      Help   Split End   Suspe Rfind Rchan Up     Down   Swap   Left   Right Curso

```

Scroll right to display the STATUS column.

Meaning of the column headings:

Column	Meaning
JOBNAME	The job that enqueued.
QUEUE	Major name of the resource (for example, SPFEDIT). Names with the prefix SYS are reserved for OS/390 internal purposes.
RESOURCE-NAME	Minor name of the resource (for example, dataset name if QUEUE is SPFEDIT).
USER	User that holds the enqueue.
STATUS	Status of ownership. Possible values: <b>OWNS</b> User is owner of resource. <b>WAIT</b> User is waiting for resource.

You can release a resource for use by other users with the DELETE command (D line command).

## Local Commands

When displaying a list of enqueues in Editor format, you can issue the following local commands from the Editor command line in addition to scroll commands: ALL, LAYOUT, RELIST and SORT. For detailed information, see the subsections in the section Useful Features.

## IDCAMS Services

The IDCAMS services option on the System Facilities Menu allow you to use the interactive execution of IBM's IDCAMS utility program. If you select this option, the following window opens:

```
----- SYSTEM FACILITIES -----
OPTION ===> 6
                               Userid      MBE
                               Time       08:58:50
                               +ELC521
!
!          VSAM services           ! E
!
! Select function:    LL -- Listcat Level(level)   !
!                      LE -- Listcat Entry(name)   !
! Name or level :   !
! Catalog Name :   !
! List options : S   ( S for short, D for detail)   !
!
! Direct Access Method Services Command:
! _____
! _____
! _____
! _____
+
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help   Split End   Suspe Rfind Rchan Up     Down   Swap   Left   Right :s
```

The fields in this screen speak for themselves, but for more details on VSAM services, consult the following IBM publications:

- OS/390 Extended Architecture, VSAM Catalog Administration: Access Method Services Reference, GC26-4136-4
- OS/390 Extended Architecture, Integrated Catalog Administration: Access Method Services Reference, GC26-4135-5